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ABSTRACT

An investigation of the work environment of child caregivers in Israel focused on the amount of professional support the caregivers received and the group characteristics of the children in their care. A total of 41 caregivers were sampled from a population of 97 sponsored family day care (FDC) providers. Most of the sampled FDC homes provided care for infants and toddlers only. Two sets of data were obtained for each caregiver, one based on an observation day and the other on a structured interview. Caregiver characteristics, professional support and group composition in the work environment, caregiver's professional attitudes and beliefs about development, and the quality of care were assessed. Findings indicated that professional support was the best predictor of quality of interaction, and group composition was the best predictor of the educational program. Professional support and group composition had no effects on caregivers' attitudes and beliefs. Better educated caregivers attributed to themselves more influence, but did not necessarily provide care of a better quality. Caregivers who attributed more influence to themselves or who expected early development interacted more positively with children and spent less time in group interaction. Caregivers who believed in more authoritarian control methods tended to impose more restrictions on children and provided a poorer educational environment. (RH)

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Attitudes and Behaviors of Caregivers in Family Day Care: The Effects of Personal Background, Professional Support System and the Immediate Caregiving Environment.

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ABSTRACT

This study suggests, on the basis of an examination of 41 FDC caregivers, that while professional support was the best predictor of "quality of interaction", group-composition was the best predictor of the "educational program". Professional support and group-composition had no effects on caregivers' attitudes and beliefs. Better educated caregivers attributed to themselves more influence, but did not neccessarily provide better quality care. Generally, however, caregivers who attribute more influence to themselves interact more positively with the children and spend less time in group-interaction, as did those who expected early development. Caregivers who believe in more "authoritarian" control methods tend to impose more restrictions on the children and provide a poorer educational environment.

This paper suggests that both from a conceptual and practical point of view research on caregivers will benefit from regarding them as professionals rather than as "substitute mothers".

Attitudes and Behaviors of Caregivers in Family Day Care: The Effects of Personal Background, Professional Support System and the Immediate Caregiving Environment.

In the previous decade, research into the effects of day care on the development of children focused on the comparison of home-reared children with day care reared children, mostly in an attempt to find out whether day care has a detrimental or beneficial effect on child development (Clarke-Stewart & Fein, 1983; Howes, 1986). Within the framework of this approach caregivers, especially of young children, were generally perceived as "substitute mothers". This is especially the case with Family Day Care (FDC), in which the caregiver provides care in her own home (rather than a school or a center), generally caring for her own child as part of a group whose age composition resembles a family (Howes, 1983). The criteria for evaluating caregivers' behavior were derived from research that investigated the effects of maternal behavior on child development (e.g. Clarke-Stewart, 1973; Carew, 1980).

At the present, there is growing recognition among researchers that "Day Care", as well as "care of mother", cannot be regarded as a unitary description of the environment of the child. As a result recent research has investigated variations in types of Day Care and the different levels and dimensions of quality of care on various aspects of the child's behavior and development (Howes, 1986; McCartney, 1984; McCartney, Scarr, Phillips & Grajek, 1985; McCartney & Scarr, 1987). This cumulative literature suggests that the concept of the caregiver as a "substitute mother" may be

inadequate, possibly hindering a systematic conception of the role of a caregiver (Moss, 1987). What is needed is a model that will enable a refinement of the understanding of different dimensions of the caregiver's role and the "quality care" provided. Such a model must assume that the nature of the relationship between caregiver and child differs from that of mother and child in its emotional intensity, emotional investment and life-history. It must also assume that providing care to a group of infants and toddlers simultaneously creates a context of interaction unlike most families and that providing such care within a framework of an institution or organization adds further dimensions to the professional aspect of the caregiver's role (Hess, Price & Dickson, 1981; Rubenstein & Howes, 1979).

An Ecological approach to the study of the role of caregivers in Day Care settings (Bronfenbrenner, 1979) suggests that besides the effects of personal and professional background, the caregiver role can be fully understood only in the wider context of the environment in which it is enacted. Thus, a caregiver's behavior and the program she provides to infants and toddlers in her care can be seen to be influenced by a large number of factors. The present study examines the following three factors:

Personal and/or professional background - Previous research found that caregivers with more education spend more time in social interaction and cognitive/language stimulation. Those with more experience do so less (Roupp et al.,1979) but are more responsive (Howes, 1983). Caregivers with more child-related training provide better care (Howes,1983; Stalling & Porter, 1980).

Attitudes towards caregiver role and beliefs about child development - While studies have demonstrated the effect of parental beliefs on their interactions with children (Bugental & Shennum, 1984; Dix & Grusec, 1983) almost no such data is available for caregivers. A constructivist point of view will predict that the experience of caregivers in the context of the child-care environment will determine the perception of their role and their beliefs concerning child development (Knight & Goodnow, 1988). Several studies in recent years have documented variability among caregivers in their perception of their professional role (Wattenberg, 1977; Shinman, 1981) and their influence on the development of children in their care (Feldman & Yirmiya, 1986). Of special interest is the effect of caregivers' perception of their professional role on the quality of care they provided.

Caregiver's work environment - This factor has also been shown to influence caregiver's behavior (Howes, 1983). The present study distinguishes between two aspects of the work environment: amount of professional support and group characteristics of the children in care. It has been shown that caregivers receiving professional supervision or consultation, and those who are more autonomous in decisions concerning the program, tend to provide better interactions and quality care (Tizard, 1974). Further, while supervision and support helped to change caregivers' attitudes and role perception (Shinman, 1981) a short-term (5 week) course was not very effective (Jackson & Jackson, 1979). Caregivers working with larger groups of children or a small adult-to-child ratio spend more time in behavior management, and display more negative affect. They spend less time in social interaction and cognitive/language stimulation (Roupp & Travers,

1982). The age-mix of the group has an effect on the amount of time the caregiver spends with different age children and the type of activity she engages in (e.g. more controlling with a high proportion of toddlers and more language activity with preschoolers) (Stalling and Porter, 1980). It is also quite likely that the socio-economic background of the children will also have an effect.

The paper also suggests that "quality of care" should not be treated as a unitary concept. It distinguishes between the "quality of interaction" of caregiver with children and aspects of the "educational program" offered. The former assesses dimensions such as the extent of caregiver involvement with the children, responsiveness, encouragement and verbal interaction, as well as restrictiveness. The latter examines the activities included in the educational program, such as group interactions and the educational environment (e.g. space for play, accessible toys etc.). It is argued that these different aspects are affected differently by caregiver's personal background, attitudes and beliefs, and work environment.

METHOD

Sample

Forty-one caregivers were sampled from a population of 97 sponsored FDC providers (Rosenthal, 1984). Two-thirds were from the Jerusalem area, with the rest from all other locations where a sponsored system of FDC was operating. Eighty-nine percent of the FDC homes sampled provided care for only infants and toddlers under three years of age.

Procedure

Two sets of data were obtained for each caregiver: one based on an observation day and the other on a structured interview conducted in the caregiver's home. The observations were conducted by four trained observers and the interviews by three trained interviewers.

Observers used the following data collection procedures:

(1) A Time-sampling observation of the caregiver's behavior (CG OBS). The time-sampling procedure utilized predefined recording sheets and followed a prescribed routine and recording rules. During an observation day six time sample periods of five minutes each were taken of the caregiver's behavior. Behavior was observed for 10 seconds and then recorded for 10 seconds, yielding altogether 90 time sampling units of behavior for each caregiver.

(2) A Daily Log (DL) which recorded continuously the activities of the group, and the duration of each group activity, throughout the day.

(3) An Environment Rating Questionnaire (ERQ) which was adapted from the Day Care Environment Inventory (Prescott, Kritchevsky and Jones, 1972) and the Family Day Care Rating Scale (Harms and Clifford, 1984) to the Israeli setting. It was completed by the observer at the end of the observation day.

(4) A Group Composition record derived from the caregiver's files.

(5) An interview which obtained information about (a) caregivers' personal and professional background and the professional support offered by the sponsoring agency; and (b) caregivers' perception of influence and beliefs about development.

Measures

Caregiver's characteristics: Age, marital status, number of children, years of experience as caregiver, and years of education.

Work environment - professional support: Frequency of individual and/or group supervision (1 = infrequent (once a month or less) to 3 = very frequent (once a week or more), and autonomy in decision making (1 = consults with supervisor, 2 = consults with peers, 3 = decides alone).

Work environment - group composition: Group size, age mean and age mix. A composite measure of familial SES background of the children was derived from the proportion of children of distressed families and mean parental education level in the group. The correlations of the two components with the composite measure are -.88 and .88, respectively.

Caregivers' professional attitudes: Job satisfaction (ranging from 1 = highly satisfied to 4 = not satisfied at all) and attribution of influence (3 = "most influential, 1 = least influential) were measured. The ratings of attribution of influence on 11 items yielded six measures referring to three agents (self, mother and father) and two domains (emotional maturity and social development).

Caregivers' beliefs about development: This was measured by examining developmental expectations, which is an average of caregivers responses to 37 items stating the age of achievement of various developmental goals (Chronbach Alpha is .71); active learning, an average of three possible responses caregivers gave to the 37 items stating the process by which children achieve developmental goals (Chronbach Alpha is .72); and severity

of control, an average of six possible responses caregivers gave to 17 episodes of misbehavior and disobedience, ranging from "permissive" to "authoritarian" (Chronbach Alpha is .65).

The quality of care: This was assessed by examining two main dimensions, quality of interaction and educational program.

The quality of interaction of the caregiver with children included positive interaction (which is a composite measure of the ratings of positive affect (ERQ), frequency of positive responsiveness, one-to-one interaction, positive use of language,involvement with the children (not engaged in preparations) and encouragement (OBS)). Chronbach standardized item Alpha for the composite score is .66. The quality of interaction dimension also included restrictions, which is a frequency measure of caregiver's attempts to control the children's behavior (diverting attention, warning, scolding and physically removing the child from the situation (OBS)).

The educational program includes educational directed activities, which is the proportion of daily activities (DL) initiated by the caregiver which are expected to contribute to development (sensorimotor, concepts, language and general enrichment); group interaction, a measure of the frequency of caregiver interaction with the whole group (OBS); and quality of the educational environment. This latter is a composite measure derived from the ratings of several aspects of the educational environment (ERQ), including physical care conditions, amount of space available for free movement of children in- and out-door, the amount and organization of varied

toys, play materials and space. Chronbach standardized item Alpha for the composite score is .71.

Reliability - The inter-observer agreement for all measures ranged from .69 to .90 (Pearson correlation).

Data analysis

The first part of the analysis used descriptive statistics to examine individual characteristics of caregivers in the sponsored FDC system, the distinctive features of their work environment, their beliefs and quality of care provided. Next, we investigated the relative impact of the caregiver's characteristics and her work environment on her attitudes, beliefs and the quality of care provided. The third part of the analysis examined the effects of the caregiver's attitudes and beliefs on the quality of care provided. Finally we explored the relative effects of the caregiver's characteristics, her work environment and her belief system on the quality of care provided. The last three parts of the analysis used a series of regression analyses.

RESULTS

Caregivers' characteristics

The FDC caregivers in this study were mainly married women (98%). Only 20% cared for their own child as one of the FDC group (Rosenthal, 1984). They were middle-aged, with a small number of children of their own. Most

had less than a high school education and little experience in caring for children other than their own (Table 1).

Table 1 about here

Caregivers' work environment

Professional support: The professional support offered by the sponsoring organizations consists, on average, of a token two month pre-service training and bi-monthly professional supervision (individually and/or in groups) provided by the program coordinator. The caregivers tended not to consult with their peers. While most (73%) were autonomous in their decisions on daily routine and the activities planned for the children, many (70.3%) reported consulting with their supervisor about decisions on choice of equipment, furniture, toys and adaptation of their apartment to the needs of children. The two distributions were significantly different (Goodness of fit Chi-square = 44.48, $p<.001$).

Group characteristics: Usually caregivers worked with groups of five children, ranging in age from one to three years old (Table 1). Some had fairly homogenous groups (less than a six months age difference between youngest and oldest child), while others had to cope with a large age heterogeneity (more than two years between youngest and oldest child). The socio-economic backgrounds of the children in care varied in terms of parents' education level and family problems.

Caregivers' characteristics were not inter-related. Heterogenous aged groups tended to be larger ($r=.32$, $p<.05$) and to have older children ($r=.36$,

p<.01), who tend to come from homes with more problems (r=.38, p<.01) and less educated parents (r=-.49, p<.001). Caregivers in these groups had slightly longer pre-service training (r=.44, p<.01). Caregivers who had more children from distressed families received more supervision (r=.45, p<.01).

Caregivers' attitudes towards their professional role

The majority of caregivers (92.5%) were either very, or quite, satisfied with their job. This is in spite of the fact that over 50% said that it is not economically worthwhile. Most work in this field because they like children and enjoy the convenience of working at home (Rosenthal, 1984). Due to the extremely narrow distribution of job satisfaction scores, this measure was eliminated from the remaining data analysis.

Caregivers attributed more influence to themselves than to mothers, especially in the domain of social development (T pairs =4.69; DF=40; p<.001). Significant domain differences were found. Caregivers believed they had more influence over social development than over emotional maturity (T=3.07; p<.004). Although only very little influence is attributed to fathers, caregivers distinguish between domains of influence. More influence is attributed to fathers in the personal rather than the social domain (T= 2.51; p<.02).

Caregivers beliefs about development

Developmental expectation - Caregivers expect children to achieve understanding of basic concepts (relating to size, speed, time or gravity)

and social skills at about the same time (mean age is 25.93 months (SD=4.96) and 25.80 (SD=4.29), respectively). They did not expect children to attain aspects of "independence" (such as stay alone in the house, get dressed without any help, make bed, visit friends alone) until they were on average 37.55 months old (SD= 8.48).

Active Learning - Over 53% of the caregivers believe that children achieve developmental goals through the active involvement of an adult, who demonstrates, explains and encourages. Only 20% believe children develop mainly through spontaneous maturation.

Severity of Control - Most caregivers describe themselves as either "permissive" (41%) or "authoritative" (48%), with only 11% describing themselves as "authoritarian".

Inter-relations among caregivers' attitudes and beliefs

Caregivers who attribute high influence to an agent in one domain tended to do so in the other domain as well ($r=.72$ for self, $r=.68$ for mother and $r=.81$ for father, the significance level of all three correlations is at $p<.001$). Attribution of influence to themselves was negatively related to the attribution of influence to mother ($r=-.46$ and $-.30$; $p<.05$ for social development and emotional maturity, respectively). Caregivers who attributed more influence to themselves than to mothers in the emotional maturity domain, had early developmental expectations ($r=-.27$; $p<.05$) in contrast to those who attributed more influence to mothers in this domain ($r=.30$; $p<.05$).

Beliefs about the learning process are unrelated to caregivers' attribution of influence to themselves. It is, however, related to attribution of influence to mothers - those who perceive mothers as more influential (than themselves) in the emotional maturity domain believe more in the importance of the active role of the adult in facilitating child development ($r=.37$; $p<.01$). A caregiver's beliefs concerning control methods are unrelated to her perception of influence or learning process, but those who expect early development tend to believe in less severe methods of control ($r=.28$; $p<.05$).

The quality of care

Two major dimensions of quality of care were examined: quality of interaction and educational program. The descriptive statistics of these dimensions show that caregivers spent 32.6% of the observation time offering encouragement to the children (a component of the "positive interaction" composite score), and only 11.2% in restricting them. It showed further that 26% of the daily program was given to educational activities initiated by the caregiver, and 23.2% of the observation time was spent in some group interaction with the caregiver.

An investigation of the relationship among these parameters shows that (a) no correlation was found between "positive interaction" and "restrictions", (b) there is a strong relationship between the quality of the "educational environment" and the frequency of "educational activities" ($r=.56$, $p<.001$), and (c) only mild correlations were found of quality of "educational environment" with "restrictions" ($r=.27$) and the frequency of

"educational activities" with the composite of "positive interaction" ($r=.29$, both with $p<.05$).

The effects of caregiver's characteristics and work environment on her attitudes, beliefs and the quality of care provided.

A preliminary analysis revealed that caregiver's age, number of children, experience, completion of the token pre-service training, autonomy in decisions on daily program, and age mix of the group did not contribute to the explanation of her attitudes, beliefs or quality of care provided.

The hierarchical regression model examined the relative effect of the professional support received in the work environment, while controlling for the effects of the caregiver's education level and group characteristics (age mean, number of children and parental SES index), (Table 2). The model was computed separately for the different measures of attitudes and beliefs and for the different parameters of quality of care.

Table 2 about here

The most striking finding of this analysis is that while aspects of the work environment (professional support and group composition) had an effect on the quality of care provided, it had no such effect on the attitudes and beliefs of the caregivers. Beliefs about development were not explained by this regression equation. It was the better educated caregivers who attributed more influence to themselves and less to mothers and they also tended to spend less time in group interaction with the

children. Group composition was the aspect of the work environment that was the best predictor of the caregiver's likelihood of initiating educational activities. Caregivers who had older children and of higher SES parents initiated more frequent educational activities. Professional support was the best predictor of positive interaction so that caregivers who had frequent supervision, but were fairly autonomous in their decisions, were seen to more frequently interact positively with the children.

The effect of caregiver attitudes and beliefs on the quality of care provided

A hierarchical regression analysis shows that while attribution of influence, developmental expectation, and beliefs concerning methods of control all had an effect on the behavior of caregivers, beliefs about the process of learning did not (Table 3).

Table 3 about here

As table 3 shows, caregivers who attribute more influence to themselves (in the social domain) interact more positively with the children and spent less time in group interaction. Caregivers who expect early attainment of developmental goals also spend less time in group interaction and impose less restrictions on the children. Caregivers who describe themselves as more authoritarian were indeed observed to impose more restrictions on the children. They also provided a poorer quality educational environment.

A second stage regression analysis compared the effects of various factors influencing the quality of care provided by the caregiver. These factors are level of caregiver's education, frequency of supervision and the age mean of the children in the group, attribution of influence, developmental expectation and beliefs concerning control methods, which were all entered as predictors in this final analysis. This analysis confirmed the results reported above. It seems however that the previously found negative relationship between influence attribution and group interaction is explained by the effect of caregiver's education, since no such association is found when controlling for caregiver's education. Better educated caregivers attribute more influence to themselves and also tend to engage less often in group interaction with the infants and toddlers.

DISCUSSION

This paper suggests that both from a conceptual and practical point of view, research on day care and specifically on Family Day Care, will benefit from examining the behavior of caregivers as that of professionals rather than as "substitute mothers". This research evolved from a conceptual framework that assumed that the quality of care offered by a caregiver is influenced by her attitudes and beliefs, as well as by parameters defining her work environment. It further argues that "quality of care" cannot be regarded as a unitary concept and that different dimensions of care are affected differently by various parameters of the environment as well as possibly by the caregiver's belief system.

The findings of this study demonstrate that even in a home-like setting such as FDC, a caregiver's work environment (professional support and group composition) has an effect on the quality of care provided, above and beyond the effects of caregiver's education level. The findings further support the argument that caregivers' experience or a token short training course has no effect on the quality of care (Bryant, Harris & Newton, 1984; Jackson & Jackson, 1979) Indeed, the findings demonstrate that while the quality of interaction is influenced by professional support (caregivers who receive more support from their sponsoring network interact positively more frequently), the educational program is more dependent on group characteristics (those working with older children provide more frequent educational group activities, as do those who work with children from higher SES backgrounds).

The quality of care was also influenced by the caregiver's attitudes and beliefs. Those caregivers who attribute more influence to themselves than to mothers in the social domain (which is relevant to the context of their interaction with the group of children) provided more frequent positive (and individual) interactions. Those who believed in the need for more severe control methods are more restrictive and provide an educational environment of poorer quality. It is interesting to note that although attitudes and beliefs had an effect on the quality of care they were not influenced by the caregiver's work environment. Our expectation (Tizard, 1974; Shinman, 1981) that caregivers who receive more autonomy and supervision will perceive themselves as having more influence on children's development was not supported in this study. It could very well be that the

variablity among caregivers in the professional support they received was not sufficient to demonstrate such a relationship.

On the practical level, the findings of this study are relevant to the argument that conceptualizing FDC providers as "substitute mother" may hinder attempts to improve care through training or acquisition of particular skills (Ferri & Birchall, 1986). By highlighting the professional parameters of the role of the caregiver attention can be focused on the impact of different forms of professional support offered by the sponsoring network of the FDC program (Wattenberg, 1977; Stalling & Porter, 1980; Moss, 1987). Such a revised attitude may also reduce some of the emotional conflict of both mothers and caregivers resulting from their different ways of relating to the child, while at the same time legitimizing the benefits of the caregiver's unique relationship with the child (Mayall & Petrie, 1983). The findings of this study suggest, for example, that supervisors of the sponsoring network work more with the educational aspects of the caregiving environment and less on caregivers' attitudes and beliefs. This implies that adopting a comprehensive model of the caregiver's role, and studying systematically the effects of certain parameters on specific behaviors of caregivers, may help in developing specific policy directions for sponsored, or otherwise supported, FDC programs.

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Table 1. Descriptive Statistics of the Characteristics of Caregivers, Their Working Environment, Their Attitudes and Beliefs and the Quality of Care Provided by Them

	Mean	S.D.	Range	N
Caregivers' Characteristics				
Age (years)	35.10	7.27	25.0 - 56.0	40
Experience (years)	2.66	1.64	1.0 - 7.0	41
Education (years)	10.41	1.92	6.0 - 16.0	41
Number of children	3.5	1.95	1.0 7.0	40
Caregiver's Work Environment				
Professional Support				
Training (months)	2.12	0.97	1.0 - 4.5	41
Autonomy (equipment)	1.54	0.87	1.0 - 3.0	37
Autonomy (daily routine)	2.46	0.87	1.0 - 3.0	37
Supervision (frequency)	2.02	0.57	1.0 - 3.0	40
Group Composition				
Age Mean (months)	25.57	5.45	13.0 - 36.5	41
Age Mix (SD)	5.52	3.56	0.4 - 14.3	41
Number of children	5.17	.83	3.0 - 7.0	41
Mean parental education (years)	12.37	2.63	8.2 - 17.8	41
Proportion of distressed families	.21	.27	0 - 1.0	41

Table 3. Hierarchical Regression of Caregiver's Quality of Care on Her Attitudes and Beliefs

(Beta coeficients, R-square change and Adjusted R-square) 1

	Self: social	Mother: emotional	R-square change	Developmental expectation	Active learning	Severity of control	R-square change	Final R-Square	Adjusted R-Square
Quality of Interaction									
Positive Interaction	.35*	-.33*	.31***	-.15	-.02	.11	.01	.33**	.23
Restrictions	-.04	.06	.03	.30	-.18	.30*	.11	.30*	.19
Eucational Program									
Educational Activities	.05	-.28	.13	-.19	-.04	-.07	.01	.18	.04
Group Interaction	-.52***	-.07	.34***	.34*	-.14	.01	.02	.48***	.40
Educational Environment	.23	-.08	.08	-.12	-.06	-.40**	.14*	.27*	.16

[1]Beta values and adjusted R-square are taken from the final equation.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 4. Second Stage Regression Analysis: The Comparative Effects of Caregivers' Characteristics, Work Environment and Belief System on Quality Care (Beta Coefficients, R-Square Change and Adjusted R-square) [1]

	Caregivers' Characteristics	Work Environment			Belief System					
	Educational Level	Supervision	Mean Age	R-Square Change	Influence Self: social	Developmental Expectations	Severity of Control	R-Square Change	Final R-Square	Adjusted R-Square
Quality of Interaction										
Positive Interaction	-.03	.41**	.07	.19	.47**	-.28*	.12	.30**	.49***	.39
Restrictions	-.09	.38**	-.11	.26**	-.19	.30*	.29*	.22**	.48***	.39
Eucational Program										
Educational Activities	-.03	-.21	.60***	.31**	.21	-.28	-.06	.13	.44***	.32
Group Interaction	-.40**	.09	.49***	.41***	-.12	.31*	.01	.11	.52***	.44
Educational Environment	.03	.04	.38*	.19*	.09	-.23	-.41**	.25**	.44**	.34

[1]Beta values and adjusted R-square are taken from the final equation

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$